



## Klamath Network Featured Creature

### January, 2013

#### Cushion buckwheat (*Eriogonum ovalifolium*)

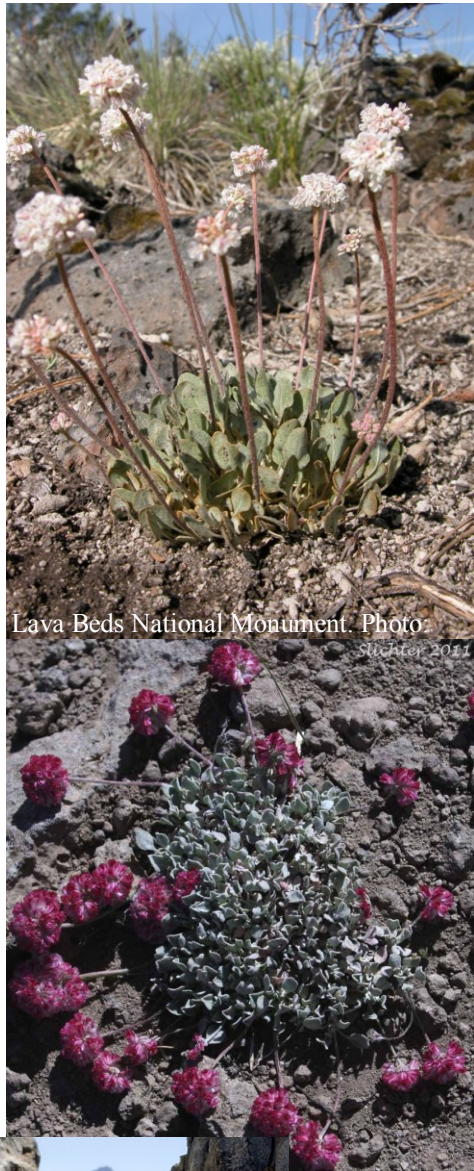
##### General Description:

The cushion buckwheat (*Eriogonum ovalifolium*) is an exceptionally variable native buckwheat found across much of western North America. It occurs in harsh rocky places and up to very high elevations. The common name refers to the dense, mat- or cushion-like growth habit of the species, which is expressed best in high elevation environments. The name cushion is a misnomer because the plants have dense, intricately branched woody crowns of upward pointing twigs just underneath the highly tufted leaves. They are not soft and spongy and made for sitting on. This high elevation form contrasts with the much less cushion-like form in lower elevation environments like at Lava Beds.

Leafless flower stalks ascend 20-30 cm above the compact, miniature buckwheat shrubs. The globes of flowers range in color from white to yellow to pink or reddish and are exceptionally showy on some varieties. These features make the cushion buckwheat a favorite among rock gardeners. At least two varieties are very rare. They are local endemics known only a few small populations.

##### Ecology and Life History:

Cushion plants are a lifeform found in cold regions. The growth habit of tightly clustered leaves creates a boundary layer around leaves making the microenvironment warmer, calmer and more humid. Winds do not penetrate inside the canopy. Leaves are retained within the cushion after they die, and recycling of nutrients is particularly efficient.



Alpine cushion plants are described as ecosystem engineers. They are particularly important pioneering species in harsh rocky environments. They act as foundation species not only for other plant species but other trophic levels. They facilitate other plants by providing a sheltered environment for establishment. Cushion plants are associated with much higher numbers and diversity of insects and arthropods. They are miniature, oases of biodiversity.

Cushion buckwheat reproduce sexually and germinate from seed. New plants establish infrequently, but plants may be very long-lived. Cushion plants similar to cushion buckwheat have been aged based on their growth rates to be exceedingly old: up to 3,000 years! This does not necessarily mean that cushion buckwheat may have such longevity, but they might in some places.

##### Where to see in the Network:

Cushion buckwheat is common in the higher elevations of Crater Lake and Lassen Volcanic National Monument. It is also common at Lava Beds. It is found in the expansion area proposed for Oregon Caves. It has not been documented at Whiskeytown, but it is not out of the question that there are individuals somewhere in the rocky habitat on Shasta Bally waiting to be discovered!

##### More Information:

Attenborough, D. 1995. The Private Life of Plants: A Natural History of Plant Behavior. London: BBC Books.